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EXAMINER

ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 07/29/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,938

Applicant(s)

LACHTAR ET AL.

Examiner

Meless N Zewdu

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-36 are pending in this action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4-12, 16-17, 23-24 and 30-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharma et al. (Sharma) (US 6,069,871).

As per claim 4: a wireless communication system that provides wireless service to a mobile unit operating within a service area, the wireless communication system comprising:

a plurality of base station controllers in at least partially overlapping sectors, at least one of the base station controllers producing a capacity request in response to a request made by the mobile unit reads on '871 (see fig. 1; col. 4, lines 31-63).

the plurality of base station controllers each having a first plurality of base stations coupled to them, the first plurality of base stations operating on a first carrier frequency, at least one candidate base station of the first plurality of base stations

receiving the capacity request, determining its net excess capacity based upon available forward link resources and available reverse link resources, and responding with a net excess capacity response reads on '871 (see col. 13, lines 18-38, particularly lines 22-29).

the plurality of base station controllers each further having a second plurality of base stations coupled to them, the second plurality of base stations operating on a second carrier frequency, the first and second carrier frequencies being in the same or different bands, at least one candidate base station of the second plurality of base stations receiving the capacity request, determining its net excess capacity based upon available forward link resources and available reverse link resources, and responding with a net excess capacity response reads on '871 (see fig. 1; col. 4, lines 31-63; col. 13, lines 18-38, particularly lines 30-38).

and the base station controllers operating to assign the mobile unit to a responding candidate base station of the plurality of base station controllers based upon received net excess capacity response reads on '871 (see col. 13, lines 39-44).

As per claim 5: the wireless communication system wherein at least one of the frequencies other than the originating carrier frequency has an assigned high priority reads on '871 (see fig. 5A, block 524; fig. 5B, block 536; col. 9, lines 29-38) and further including:

the at least one base station controller waiting a specified time period for a capacity estimate response for carrier frequencies of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

when the capacity estimate response from the at least one of the high priority carrier frequencies is positive, the at least one base station controller selecting a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the at least one of the high priority carrier frequencies reads on '871 (see abstract; fig. 5A, blocks 502, 504, 520, 524 and 522; col. 9, lines 29-39).

and the at least one base station controller servicing the mobile unit with the selected servicing base station on the at least one of the high priority carrier frequencies reads on '871 (see abstract; fig. 5A; col. 9, lines 12-38).

As per claim 6: most of the features of claim 6 are similar to the features of claim 4. Hence, the similar features of claim 6 are rejected on the same ground as claim 4. The difference features are provided as shown below.

at least one of the first and second carrier frequencies having an assigned high priority reads on '871 (see fig. 4, block 410; fig. 5A; 5B; col. Col. 9, lines 29-38).

and the at least one base station controller (see fig. 1) waiting a specified time period for a capacity estimate response for carrier frequencies of the assigned high priority (see figs. 5A and 6A) and, when the capacity estimate response from the high priority carrier frequency is positive, operating to assign the mobile unit to at least one responding candidate base station of the first plurality of base stations or to at least one responding candidate base station of the second plurality of second plurality of base stations based upon received net excess capacity response from the high priority carrier frequency reads on '871 (see figs. 5A and 6B; col. 9, lines 12-38).

As per claim 7: the feature of claim 7 is similar to the features of claim 6. Hence, claim 7 is rejected on the same ground as claim 6.

As per claim 8: the feature of claim 8 is similar to the features of claim 6. Hence, claim 8 is rejected on the same ground as claim 6.

As per claim 9: the feature of claim 9 is similar to the features of claim 6. Hence, claim 9 is rejected on the same ground as claim 6.

As per claim 10: the feature of claim 10 is similar to the features of claim 6. Hence, claim 10 is rejected on the same ground as claim 6.

As per claim 11: the features of claim 11 are similar to the features of claim 4 except one difference. Hence, claim 11 is rejected on the same ground as claim 4. The difference features has been treated as shown below.

and the at least one base station controller operating if the excess capacity response for the base stations in overlapping sectors indicate inadequate capacity on a first one of the first and second carrier frequencies to assign the mobile unit to at least one responding candidate base station of the first plurality of base station on the other of the first and second carrier frequencies reads on '871 (abstract; col. 9, lines 16-29).

As per claim 12: the features of claim 12 are similar to the features of claim 5. Hence, claim 12 is rejected on the same ground as claim 5.

As per claim 16: the features of claim 16 are similar to the features of claim 4 except one difference which treated as shown below. Hence, similar features of claim 16 are rejected on the same ground as claim 4.

When the candidate base station is associated with a cell in which the mobile station accessed the wireless communication system, retaining that candidate base station as one of the candidate base stations reads on '871 (see col. 7, lines 32-48).

As per claim 17: the method wherein, at least one of the frequencies other than the originating carrier frequency has an assigned high priority, and further including the steps of:

waiting a specific time period for a capacity estimate responses for carrier frequencies of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

when the capacity estimate response from the at least one of the high priority carrier frequencies is positive, selecting a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the at least one of the high priority carrier frequencies reads on '871 (see abstract; col. 9, lines 29-39).

As per claim 18: most of the features of claim 18 are similar to the features of claim 4. Hence, claim 18 is rejected on the same ground as claim 4. The difference features have been treated in a manner shown below.

Receiving a request from a mobile unit and determining an operational position of the mobile unit based upon the location of a base station receiving the request reads on '871 (see col. 14, lines 3054); based upon the operational position of the mobile unit, requesting capacity information from candidate base stations of the first the plurality of base stations and candidate base stations of the second plurality of base stations reads

on '871 (see col. 14, lines 37-54); waiting a specific time period for a capacity estimate responses for carrier frequencies of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

when the capacity estimate response from the at least one of the high priority carrier frequencies is positive, selecting a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the at least one of the high priority carrier frequency reads on '871 (see abstract; col. 9, lines 29-39). But, Sharma does not explicitly teach about determining an operational position of the mobile unit based upon position of the mobile unit, as claimed by applicant. However, in a related field of endeavor, George teaches that a mobile station transmits its location to a controller or control unit which enables the control unit to determine which zone the mobile station located (see col. 1, line 65-col. 2, line 44). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Sharma with that of George for the advantage of avoiding a waste of channel capacity and an inter-zone link when communication is only required within one zone (see col. 1, lines 45-52).

As per claim 19: the feature of claim 19 is similar to the feature of claim 18. Hence, claim 19 is rejected on the same ground as claim 18.

As per claim 20: the method wherein no capacity response is received from the carrier frequency with the high priority reads on '871 (see col. 7, lines 8-27), and wherein the step of selecting comprises the step of:

selecting a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the next highest priority carrier frequency reads on '871 (see col. 9, lines 29-38). Channel selection is made for next use not for previous.

As per claim 21: the method wherein, a plurality of the carrier frequencies have an assigned high priority reads on '871 (see col. 9, lines 29-38) , and wherein the step of waiting comprises:

waiting the specified time period for a capacity estimate responses for each carrier frequency of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

As per claim 22: the feature of claim 22 is similar to the feature of claim 20. Hence, claim 22 is rejected on the same ground and motivation as claim 20. Furthermore, fig. 4 shows that channel is selected from reported excess capacity wherein selection indicates selecting the one channel with more preferable parameters than the others.

As per claim 23: most of the features of claim 23 are similar to the features of claim 4. Hence, claim 23 is rejected on the same ground as claim 4. The difference feature has been addressed as shown below.

determining an operational position of the mobile unit based upon the operational position of the mobile unit reads on '871 (see abstract; col. 14, lines 27-41).

As per claim 24: the features of claim 24 are similar to the features of claim 17. Hence, claim 24 is rejected on the same ground as claim 17.

As per claim 30: a computer readable medium that is readable by at least one component of a wireless communication system that includes a first plurality of base stations that operate on a first carrier frequency and a second plurality of base stations that operate on a second carrier frequency and that supports a mobile unit reads on '871 (see abstract; fig. 1; col. 11, lines 19-43; col. 15, lines 35-42) the first and second carrier frequencies being in the same or different bands (abstract), the first plurality of base station and the second plurality of base stations providing overlaying service, at least one of the base station having an assigned high priority (see fig. 1; col. 4, lines 5-17; col. 15, lines 35-42)), the computer readable medium comprising:

a set of instructions that, when executed by the wireless communication system, causes the wireless communication system to perform the following: receive a request from a mobile unit reads on '871 (see col. 14, lines 30-33); determine an operational position of the mobile unit based upon the location of a base station receiving the request reads on '871 (see col. 14, lines 34-36); based upon on the operational position, of the mobile unit, request capacity information from candidate base stations of the first plurality of base stations and candidate base stations of the second plurality of base stations reads on '871 (see col. Col. 14, lines 37-42); wait the specified time period for a capacity estimate responses for each carrier frequency of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5); receive net excess capacity report from the candidate base stations, each net excess capacity response based upon available forward link resources and available reverse link resources for a respective candidate base station (reads on '871 (see col. 14, lines

43-47); if the capacity estimate response from the highest priority carrier frequency is positive, select a serving base station from the candidate base stations upon the positive net excess capacity response for the highest priority frequency reads on '871 (see fig. 5A; col. 14, lines 47-52); and service the mobile unit with the selected servicing base station on the highest priority carrier frequency reads on '871 (see col. 14, lines 53-61).

As per claim 31: the computer readable medium wherein the set of instructions include instructions that cause the wireless communication system to:

wait the specified time period for a capacity estimate response for the carrier frequency of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

As per claim 32: the computer readable medium wherein the set of instructions include instructions that cause the wireless communication system to:

select a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the next highest priority carrier frequency reads on '871 871 (see col. 9, lines 29-38). Channel selection is made for next use not for previous.

As per claim 33: the feature of claim 33 is similar to the feature of claim 31. Hence, claim 33 is rejected on the same ground as claim 31.

As per claim 34: the feature of claim 34 is similar to the feature of claim 32. Hence, claim 32 is rejected on the same ground as claim 32.

As per claim 35: a computer readable medium that is readable by at least one component of a wireless communication system that includes a first plurality of base station controllers in at least partially overlapping sectors, at least one of the plurality of base station controllers having a first plurality of base stations and that operates on a first carrier frequency and a second plurality of base stations that operate on a second carrier frequency and that supports a mobile unit reads on '871 (see abstract; fig. 1; col. 11, lines 19-43; col. 15, lines 35-42) the first and second carrier frequencies being in the same or different bands (abstract), the first plurality of base station and the second plurality of base stations providing overlaying service, and at least one of the plurality of base station controllers having a base station that operates only on one of the first and second carrier frequencies reads on '871 (see col. 10, lines 28-59; fig. 1; col. 4, lines 5-17; col. 15, lines 35-42)), the computer readable medium comprising:

a set of instructions that, when executed by the wireless communication system, causes the wireless communication system to perform the following: receive a request from a mobile unit reads on '871 (see col. 14, lines 30-33); determine an operational position of the mobile unit based upon the location of a base station receiving the request reads on '871 (see col. 14, lines 34-36); based upon on the operational position of the mobile unit, request capacity information from candidate base stations of the plurality of base station controllers reads on '871 (see fig. 1; col. Col. 14, lines 37-42); receive net excess capacity responses from the candidate se stations of the plurality of base stations, each net excess capacity response based upon available forward link resources and available reverse link resources for a respective candidate base station

reads on reads on '871 (see col. 14, lines 43-47; if the excess capacity responses for the base stations in overlapping sectors indicate inadequate capacity on a first one of the first and second carrier frequencies, select at least one servicing base station of the base station controllers in overlapping sectors on the other of the first and second carrier frequencies from the candidate base stations based upon the received net excess capacity responses, the at least one servicing base station corresponding to either the first carrier frequency or the second carrier frequency reads on '871 (see figs. 1, 5A, 6B1; abstract; col. 2, line 18-col. 3, line 30; col. 4, line 19-col. 5, line 17; col. 7, lines 1-53; col. 14, lines 22-61); and service the mobile unit with the selected servicing base station on the highest priority carrier frequency reads on '871 (see col. 14, lines 53-61).

As per claim 36: the computer readable medium wherein at least one of the carrier frequencies has an assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5), and wherein the set of instructions includes instructions that cause the wireless communication device to:

wait the specified time period for a capacity estimate response for the carrier frequency of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 13-15 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma in view of George (US 5,214,789).

As per claim 1: a wireless communication system that provides wireless service to a mobile unit operating on one of a first carrier frequency and a second carrier frequency within a service area, the first and second carrier frequencies being in the same or different bands, the wireless communication system comprising:

at least one base station controller, the at least one base station controller producing a capacity request in response to a request made by the mobile unit on an originating carrier frequency of the first and second carrier frequencies reads on '871 (see col. 5, lines 7-17).

a first plurality of base stations coupled to the at least one base station controller, the first plurality of base stations operating on a first carrier frequency, at least one candidate base station of the first plurality of base stations receiving the capacity request, determining its net excess capacity based upon available forward link resources and available reverse link resources, and responding with a net excess capacity response reads on '871 (see col. 13, lines 18-38, particularly lines 22-29).

a second plurality of base stations coupled to the at least one base station controller, the second plurality of base stations operating on a second carrier frequency, at least one candidate base station of the second plurality of base stations receiving the capacity request, determining its net excess capacity based upon available forward link response and available reverse link resources, and responding with a net excess capacity response reads on '871 (see col. 13, lines 18-38, particularly lines 30-38).

and the at least base station controller operating to assign the mobile unit by selecting at least one servicing base station from the candidate base stations based upon the received net excess capacity response reads on '871 (see abstract; fig. 1, elements 104 and 106; col. 4, line 64-col. 5, line 36). But Sharma does not explicitly teach about selecting the originating carrier frequency despite a higher priority for the other of the first and second carrier frequencies, as claimed by applicant. The interpretation of this difference feature is channel allocation based on position or location. However, George teaches that radio frequency channel can be allocated based on position or location (see title; fig. 4; col. 1, line 65-col. 2, line 45). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Sharma with that of George for the advantage of avoiding a waste of channel capacity and an inter-zone link when communication is only required within one zone (see col. 1, lines 45-52).

As per claim 2: the wireless communication system wherein, inadequate capacity is indicated in the excess capacity response for the originating carrier frequency reads on '871 (see fig. 5B, blocks 528, 526 and 540; col. 9, lines 12-38) and further including:

the at least one base station controller selecting the other of the carrier frequencies than the originating carrier frequency reads on '871 (see col. 4, line 64-col. 5, line 17).

As per claim 3: the wireless communication system wherein at least one of the frequencies other than the originating carrier frequency has an assigned high priority reads on '871 (see fig. 5A, block 524; fig. 5B, block 536; col. 9, lines 29-38) and further including:

the at least one base station controller waiting a specified time period for a capacity estimate response for carrier frequencies of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

when the capacity estimate response from the at least one of the high priority carrier frequencies is positive, the at least one base station controller selecting a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the at least one of the high priority carrier frequencies reads on '871 (see abstract; fig. 5A, blocks 502, 504, 520, 524 and 522; col. 9, lines 29-39).

the at least one base station controller servicing the mobile unit with the selected servicing base station on the at least one of the high priority carrier frequencies reads on '871 (see abstract; fig. 5A; col. 9, lines 12-38).

As per claim 13: the features of claim 13 are similar to the features of claim 4 except the following differences. Hence, claim 13 is rejected on the same ground as claim 4 and the difference features are provided as shown below.

determining an operational position of the mobile unit based upon location of a base station receiving the request reads on 871 (see col. 14, lines 28-36).

based upon the operational position of the mobile unit, requesting capacity information from candidate base stations of the first plurality of base stations and candidate base station of the second plurality of base stations reads '871 (see col. 14, lines 37-41). But, Sharma does not explicitly teach about selecting the originating carrier frequency despite a higher priority for the other of the first and second carrier frequencies whenever adequate capacity is indicated in the excess capacity responses for the originating carrier frequency, as claimed by applicant. This feature is directed to channel allocation based on location or position. However, in a related field of endeavor, George teaches that channels can be allocated to a mobile location based on its location (see title; col. 1, line 65-col. 2, line 45). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Sharma with that of George for the advantage of avoiding a waste of channel capacity and an inter-zone link when communication is only required within one zone (see col. 1, lines 45-52).

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As per claim 14: the method wherein inadequate capacity is indicated in the excess capacity responses for the originating carrier frequency during the step of receiving net excess capacity responses, and wherein the step of selecting comprises the step of:

selecting the other of the carrier frequencies than the originating carrier frequency reads on '871 (see col. 13, lines 39-44).

As per claim 15: the method wherein, at least one of the frequencies other than the originating carrier frequency has an assigned high priority, and further including the steps of:

waiting a specified time period for a capacity estimate responses for carrier frequencies of the assigned high priority reads on '871 (see fig. 5A, block 506 and fig. 6A, block 606; col. 7, line 66-col. 8, line 5).

when the capacity estimate response from the at least one of the high priority carrier frequencies is positive, selecting a servicing base station from the candidate base stations based upon the received positive excess capacity responses for the at least one of the high priority carrier frequencies reads on '871 (see abstract; col. 9, lines 29-39).

As per claim 25: a computer readable medium that is readable by at least one component of a wireless communication system that includes a first plurality of base stations that operate on a first carrier frequency and a second plurality of bas stations that operate on a second carrier frequency and that support a mobile unit, the first and second carrier frequencies being in the same or different bands, and the first plurality base stations and the second plurality of base stations providing overlaying service

reads on '871 (see fig. 1; abstract; col. 2, line 41-col. 3, line 30), the computer readable medium comprising:

a set of instructions that, when executed by the wireless communication system, causes the wireless communication system to perform the following: receive a request from a mobile unit on one of the first and second carrier frequencies as an originating carrier frequency reads on '871 (see col. 14, lines 30-33); determine an operational position of the mobile unit based upon the location of a base station receiving the request reads on '871 (see col. 14, lines 34-36); based upon on the operational position, of the mobile unit, request capacity information from candidate base stations of the first plurality of base stations and candidate base stations of the second plurality of base stations reads on '871 (see col. Col. 14, lines 37-42); receive net excess capacity report from the candidate base stations, each net excess capacity response based upon available forward link resources and available reverse link resources for a respective candidate base station (reads on '871 (see col. 14, lines 43-47); select at least one servicing base station at the originating carrier frequency from the candidate base stations based upon the received net excess capacity response reads on '871 (see col. 14, lines 30-54). But, Sharma does not explicitly teach about--- service the mobile unit with the selected servicing base station on the originating carrier frequency despite a higher priority for the other of the first and second carrier frequencies, whenever adequate capacity is indicated in the excess capacity responses for the originating carrier frequency, as claimed by applicant. This particular feature is directed to channel allocation based on position or location. However, in a related field of endeavor,

George teaches that channels can be allocated to a mobile location based on its location (see title; col. 1, line 65-col. 2, line 45). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Sharma with that of George for the advantage of avoiding a waste of channel capacity and an inter-zone link when communication is only required within one zone (see col. 1, lines 45-52).

As per claim 26: the computer readable medium wherein the set of instructions includes instructions that cause the wireless communication system to:

select the other of the carrier frequencies than the originating carrier frequency when inadequate capacity is indicated in the response for the originating carrier frequency reads on '871 (see fig. 6B, blocks 628 and 638). As flowchart of the computer instruction/algorithm indicates the other, other than the originating, frequencies can be selected if the NEC frequency is high.

As per claim 27: the features of claim 27 are similar to the features of claim 17. Hence, claim 27 is rejected on the same ground and motivation as claim 17.

As per claim 28: the features of claim 28 are similar to the features of claim 13. The difference between the two claims is that the first is a computer readable medium and the later, a method claim. The prior art shows algorithms to perform the method steps of claim 13 (see figs. 3-6B). Hence, claim 28 is rejected on the same ground and motivation as claim 13.

As per claim 29: the features of claim 29 are similar to the features of claim 17. Hence, claim 29 is rejected on the same ground and motivation as claim 17.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N Zewdu whose telephone number is (703) 306-5418. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Meless Zewdu

M. Z.

Examiner

23 July 2004.

W. Trost

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600